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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,242	11/19/2003	Imtiaz Zafar	DP-309090	6879
2381 DELPHI TECHNOLOGIES, INC. M/C 480-410-202			EXAMINER	
			GESESSE, TILAHUN	
PO BOX 5052 TROY, MI 48			ART UNIT	PAPER NUMBER
11101,111110			2618	
			MAIL DATE	DELIVERY MODE
			03/24/2008	PAPER

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/717,242 Filing Date: November 19, 2003 Appelant(s): ZAFAR ET AL.

> Imtiaz Zafar For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed December 20, 2007 appealing from the Office action mailed March 30, 2007.

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# (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

# (3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1-3, 7-8, and 12-18.

Claims 1 though 18 are rejected in the final rejection; however, the appeal brief is as to the status of claims 4-6 and 9-11.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

# (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

# (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: the appellant is silent to claims 4-6 and 9-11, in relation to ground of rejection under 35 USC 103.

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## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

### (8) Evidence Relied Upon

6,806,838 Petros et al 10-2004 7,064,721 Zafar et al 06-2006

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

 Claims 1-3, 7-8, 12-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Petros et al (US 6,806,838)"Petros".

Claim 1, Petros teaches a stationary terrestrial/satellite antenna and receiver system for reception of AM, FM, satellite and terrestrial rebroadcast satellite signals, (see abstract and fig.3). Petros teaches a stationary satellite antenna positioned on a surface that receives satellite signals and terrestrial rebroadcast satellite signals (see col.5, lines 42-65 and figs.3 and 7-8).

Petros teaches a stationary terrestrial antenna positioned on the surface that receives AM/FM signals, the satellite and terrestrial antenna are mounted on a mounting assembly including a low noise amplifier circuit and a bezel, the bezel is adapted to contain the low noise amplifier (see col.2, lines 34-64).

Petros teaches a stationary integrated head unit positioned on the surface (see fig.3).

Petros teaches a terrestrial receiver/tuner human interface and a satellite receiver/tuner human interface, wherein the terrestrial antenna is connected to the Application/Control Number: 10/717,242

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terrestrial receiver/tuner human interface and the satellite antenna is connected to the satellite receiver/tuner human interface via a conduit (see col.5, lines 42-65 and fig.3, and 7-8 and column 3, lines 55-68, in particular col.3 lines 55-61 and figure 3 items # 328 and 320 and abstract, column 8, lines 18-58 and figure 88, in particular fig.8 items 320 and 328) where clearly shows that satellite receiver and radio receiver integrated head unit (328 of figure 8).

Claim 2, Petros teaches the satellite signals received by the satellite antenna are SDARS signals (col.3, lines 43-68).

Claim 3, Petros teaches the satellite antenna comprises: a quadrilar helix antenna (col.5, lines 6-20 and col. 6, lines 1-13)

Claim 7, Petros teaches the terrestrial antenna comprises: a retractable mast antenna (see abstract).

Claim 8, Petros teaches the terrestrial antenna comprises: an AM antenna and an FM wire antenna (col. 3, lines 42-65).

Claim 12, Petros teaches the low noise amplifier circuit comprises: a satellite low noise amplifier with a first input connected to a first end of a satellite output, wherein the output of the low noise amplifier is the SDARS/SAT/TER cable (see figs.3 and 7-8, column 8, lines 35-39).

Claim 13, Petros teaches the surface is selected from the group consisting of an desk, table, countertop, or window glass (col.5, lines 20-40 and fig.2).

Claim 14, Petros teaches the satellite and terrestrial antenna is disposed in a housing (see figs 2-3).

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Claim 15, Petros teaches the stationary satellite antenna is concentrically mounted with respect to the terrestrial antenna (see figs 3 and 7-8).

Claim 16, Petros teaches the terrestrial antenna is a retractable terrestrial antenna (col. 4, line 57-col.5, line 5).

Claim 17, Petros teaches the conduit includes a satellite-cable, a satellite-terrestrial rebroadcast cable and a terrestrial cable (see figs. 3, 7-8 and col. 4, line 57-col.5, line 5).

Claim 18, Petros teaches the conduit includes a single element satelliteterrestrial-rebroadcast-satellite cable and a terrestrial AM/FM cable (col. 4, line 57-col.5, line 5 and figs 3 and 7-8).

 Claims 4-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petros in view of Zafar (US 7,064,721).

Claims 4-6 and 9-11, Petros does not teach a patch antenna, a loop antenna, dipole. However, Zafar teaches a patch antenna, a loop antenna, dipole (col.7, lines 8-46).

One of ordinary skill in the art would be motivated to combine Petros and Zafar in order to improve Petros in installing patch, loop and dipole antenna for better reception of signals.

Both Petros and Zafar teaches satellite and radio broadcast techniques, then it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to use antennas of various design, in Petros system, as evidenced by Zafar, for better tuning the broadcast signal in any angle of reception.

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## (10) Response to Argument

#### As to claims 4-6 and 9-11 rejection under 35 USC 103

Appellant fails to argue as to claims 4-6 and 9-11 rejection. Appellant neither cancels nor indicate the status of the claims. Therefore, the examiner respectively request that the Board to sustain the rejection of those claims.

 On page 10, first paragraph of appeal, appellant argued that Petros et al (Petros) does not anticipate claims 1-3. 7-8 and 12-18.

The examiner disagrees. As regarding to claim 1, Petros teaches a stationary terrestrial/satellite antenna (see figs.3 and 7-8 items 302,304) and receiver system (see figures 3 and 8, items 314 and 324) for reception of AM, FM, (324) satellite (314) and terrestrial rebroadcast satellite signals, (see column 3, lines 44-56, column 8, and lines 19-55).

Further more, Petros teaches a stationary integrated head unit (see figures 3 and 8, item # 320) positioned on the surface (satellite/terrestrial antenna and receivers system positioned on particular application of an automobile, aircraft, boat, train etc., see column 3, lines 43-67 and column 4, lines 1-19 and column 8, lines 18-55 in particular column 8, lines 60-65) in which satellite and terrestrial radio receiver (300 and 800 of figures 3 and 8 respectively) are integrated that SDARS/RX (314) is coupled to head unit 320 via connector 330 and AM/FM is coupled to head unit 320, as disclosed in figure 3).

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On page 10, third paragraph of appeal, appellant argued that Petros does not teach or suggest "a stationary integrated head unit positioned on the surface including an AM/FM terrestrial receiver/tuner human interface and a satellite receiver/tuner human interface".

The examiner disagrees. Petros teaches a stationary integrated head unit (see figures 3 and 8, item # 320) positioned on the surface (satellite/terrestrial antenna and receivers system positioned on particular application of an automobile, aircraft, boat, train etc., see column 3, lines 43-67 and column 4, lines 1-19 and column 8, lines 18-55 in particular column 8, lines 60-65) in which satellite and terrestrial radio receiver (300 and 800 of figures 3 and 8 respectively) are integrated that SDARS/RX (314) is coupled to head unit 320 via connector 330 and AM/FM is coupled to head unit 320, as disclosed in figure 3).

Further more, Petros teaches "head unit 320 receives an output from SDARS/RX 314 which head unit 320 process and covert to an audio signal ---, likewise, the output of AM/FM tuner 320 can down convert signal and head unit 320 process to an audio, to speaker" see lines 46-53, in which Petros inherently teaches human interfacing or inputting mechanism such as switch or button in order a user operates or listens the dual mode "terrestrial AM/FM and satellite" receiver. Similar to the teaching of Petros, the admitted prior art of appellant, also clearly discloses that human interface (HMI) 5 which refers to SDARS/receiver/tuner 5, see figure 1 and paragraph 0002, lines 9-10).

On page 11, first paragraph, in particular lines 11-14, appellant argued that Petros teaches a radio head unit in communication with a separate SDARS receiver, wherein

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the SDARS receiver is located remotely from the radio head unit.

The examiner disagrees. Petros teaches, in fact, SDARS receiver within the housing of the dual radio receiver (300 or 800 of figures 3 and 8 respectively). Petros teaches SDARS receiver coupled to the head unit and AM/FM receiver in the same radio receiver apparatus "integrated". Petros teaching neither separate nor remote from the head unit as appellant argued.

On page 11, second paragraph of appeal, appellant argued that Petros teaches AM/FM receiver 324 and head unit 320 are encircled but not SDARS /RX 314, therefore SDARS/RX is remote.

The examiner disagrees. Petros teaches, in fact, SDARS receiver within the housing of the dual radio receiver (300 or 800 of figures 3 and 8 respectively). Petros teaches SDARS receiver coupled to the head unit and AM/FM receiver in the same radio receiver apparatus "integrated". Petros teaching neither separate nor remote from the head unit as appellant argued. The head unit 320, as Petros discloses, applies for both AM/FM receiver and SDARS/RX (see column 8, lines 46-55). Further more, Petrol teaches the head unit receives output from SDARS/RX down converted satellite signals via cable 330, which the head unit then processes and converts to an audio signal, likewise, the output of AM/FM tuner 324 is a down converted signal which head unit 320 process and output as audio, to speaker "human interface" (column 8, lines 46-53). The claim doesn't explicitly say that the receiver is integrated into the headset unit. The claim only says that the integrated.

On page 12, second paragraph of appeal in response to the final office

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correspondence, appellant argued that Petros does not teach or suggest a satellite low noise amplifier wherein the output of the low noise amplifier is a SDARS/SAT/TER cable, as recited in claim 12.

The examiner notes that appellant's claim 12, lacks clarity, claim 12, recites "the output of the low noise amplifier and the SDARS/SAT/TER cable", such recitation is not clear the output of the low noise amplifier and the SDARS/SAT/TER cable referring to, neither claim 1 nor preceding recitation of claim 12, has recite such an output and a cable.

The examiner notes that appellant claim 12, as filed recites that wherein the low noise amplifier circuit <u>comprises</u>, however, on page 12, appellant argues that wherein the low noise amplifier circuit <u>includes</u>.

The examiner disagrees. Petros teaches the low noise amplifier circuit (see item 326 of figure 7A and 7B).

Petros teaches a satellite low noise amplifier (LNA) (326 of figures 7A and 7B) with a first input (satellite signal received via 304) connected to a first end of a satellite output, (see figures 7A and 7B item 718) wherein the output of the low noise amplifier is the SDARS/SAT/TER cable (see figure 7A and 7B item # 718 and column 8, lines 35-39).

On page 12, third paragraph of appeal in response to final correspondence, appellant argued that Petros does not teach a satellite low noise amplifier wherein the output of the low noise amplifier is the SDARS/SAT/TER cable.

The examiner respectively disagrees. Petros teaches the output of the low noise

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amplifier is the SDARS/SAT/TER cable (see figure 7A and 7B item # 718 and column 8,

lines 35-39).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Tilahun Gesesse

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